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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,124	09/28/2001	Brian A. Batke	01AB074 (1506.040)	8068
63122	7590	02/04/2008	EXAMINER	
ROCKWELL AUTOMATION, INC./BF			EL CHANTI, HUSSEIN A	
ATTENTION: SUSAN M. DONAHUE, E-7F19			ART UNIT	PAPER NUMBER
1201 SOUTH SECOND STREET			2157	
MILWAUKEE, WI 53204			MAIL DATE	DELIVERY MODE
			02/04/2008	PAPER

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Technology Center 2100

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/967,124

Filing Date: September 28, 2001

Appellant(s): BATKE ET AL.

Keith Baxter (Reg. No. 31,233)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed Oct. 31, 2007 appealing from the Office action mailed July 27, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Papadopoulos et al., U.S. Patent No. 6,061,603

Lindner, U.S. Patent No. 6,640,140

Bronikowski, U.S. Patent No. 6,947,798

Hauet, U.S. Patent No. U.S. 6,799,077

Ryan et al. U.S. Patent No. 6,477,435

Chan U.S. Patent No. 6,588,673

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 10,15-20 are rejected under 35 U.S.C. §103(a) as being

unpatentable over Papadopoulos et el. (US 6,061,603) in view of Lindner et el. (US 6,640,140) in further view of Bronikowski et el. (6,947,798).

Papadopoulos teaches the invention substantially as claimed including a control system which allows a user to access a programmable Logic Controller (PLC) system over a communication network such as an Internet network using a web browser. The system includes an Internet web interface between the network and the programmable Logic Controller. (See abstract).

As to claim 1, Papadopoulos teaches an industrial control system for controlling an industrial process comprising: (See Fig. 2) a plurality of I/O devices capable of exchanging signals with the industrial process; (See Fig. 2 (40))

a web access module including a web server coupled to a programmable logic control (PLC), wherein the web server is capable of being coupled to at least one remote device via the Internet, and (See Fig. 2 (4, 30, 32, 34, 40); Fig. 3) wherein the PLC is coupled to the I/O devices;

wherein the web access module further includes program development software including application software that can be utilized to generate a controller program for at

least one of the PLC and one of the I/O devices, and (See col. 4, lines 37-39. - Papadopoulos teaches remote commands processing including data flow control.) wherein the web server is capable of providing the program development software, so that the remote device is able to generate the controller program. (See col. 4, 34-39. - Papadopoulos teaches remote commands processing including data flow control.)

Papadopoulos does not explicitly teach providing the software over the Internet. However, Lindner expressly discloses web pages which includes controller programs being transmitted over the internet which are used to control PLCs. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this would eliminate the need for an attendant to be present for software changes thereby providing for a cost efficient, fast and flexible system by remotely installing software changes.

Neither Papadopoulos nor Lindner teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col. 6, line 10. See also col. 1, line 60-col. 2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines 1-54. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as

taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 2, Papadopoulos teaches the industrial control system of claim 1, wherein the PLC and the web server are one of (a) implemented in a single computer executing two programs; and

(b) implemented respectively in two different computers that are in communication via a communication link. (See Fig. 2)

Papadopoulos fails to teach the implementation of the system in a single computer executing two programs. However, Lindner expressly discloses such implementation. (See abstract and Fig. 1.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with the implementation taught by Lindner, because this system would be more robust with one computer executing two programs since it would at the very least eliminate timing or synchronization issues.

As to claim 3, Papadopoulos teaches the industrial control system of claim 1, wherein the PLC executes the controller program, once the remote device has generated the controller program using the application software and the controller program has been returned to the web access module from the remote device. Papadopoulos fails to teach executing the controller program, once the remote device

has generated the controller program. However, Lindner expressly discloses such limitation. (See col. 4, line 35 - col. 5, line 6.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with the remote programming taught by Lindner, because this system would eliminate the need for an attendant to be present to run the actual software.

Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col. 6, line 10. See also col. 1, line 60-co1.2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 4, Papadopoulos teaches the industrial control system of claim 1, wherein the program development software is stored within at least one of the PLC, the web server, a memory device within the web access module, a memory device within at least one of the I/O devices and a remote memory device.

Papadopoulos fails to explicitly teach the limitation of claim 4. However, Lindner expressly discloses such limitation. (See Fig.1)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with storing the programming software in the PLC as taught by Lindner, because this system would eliminate the need for an attendant to be present to run the actual software.

Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and col. 5, line 62-co1.6, line 10.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 5, Papadopoulos teaches the industrial control system of claim 4, wherein an existing controller program is stored within at least one of the PLC, the web server, a memory device within the web access module, a memory device within at least one of the I/O devices and a remote memory device.

Papadopoulos fails to explicitly teach the limitation of claim 5. However, Lindner expressly discloses such limitation. (See Fig.1)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with storing the programming software in the PLC as taught by Lindner, because this system would eliminate the need for an attendant to be present to run the actual software.

As to claim 10, Papadopoulos teaches the industrial control system of claim 1, wherein the web server is coupled to the Internet by way of an Internet interface, and (See Fig. 1) wherein the PLC is coupled to the I/O devices by way of a control network interface.

Papadopoulos fails to explicitly teach the PLC coupled to the I/O devices by way of a control network interface. However, Lindner expressly discloses such limitation. (See Fig. 1, 30a, 22b)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with the PLC coupled to the I/O devices by way of a control network interface as taught by Lindner, because this system would be more flexible.

As to claim 14, Papadopoulos teaches the industrial control system of claim 13, wherein the signal must be received only when the application software to be sent is a new version of the program development software that has not earlier been communicated to the remote device.

Papadopoulos fails to explicitly teach the software replacement limitation. However, Lindner expressly discloses such limitation. (See col. 4, lines 25-30.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with the PLC coupled to the I/O devices by way of a control network interface as taught by Lindner, because this system would be more flexible.

Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-co1.6, line 10. See also col. 1, line 60-col. 2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 15, Papadopoulos teaches in an industrial control system having a plurality of control devices that operate to monitor and control an industrial process, a web access module coupled to the plurality of control devices, the web access module comprising: a memory means for storing program development software including application software utilized to generate a controller program for operation on at least one of the web access module and one of the control devices; and (See Fig. 2.
(36))

a processor means coupled to the memory means, the processor means for sending the program development software to a remote device and receiving communications concerning the controller program from the remote device, wherein the controller program is generated at the remote device through the use of the program development software, (See Fig. 2.)

Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col. 6, line 10. See also col. 1, line 60-col. 2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines 1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

wherein the web access module is further adapted to allow for communications between the processor means and the remote device by way of the Internet. (See col. 4, lines 31-36.)

Papadopoulos does not explicitly teach providing the software over the Internet. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes.

As to claim 16, Papadopoulos teaches the web access module of claim 15, wherein the processor means includes a web server and a PLC, and wherein an existing controller program is stored by the memory means in association with a particular version of the program development application software. (See Fig. 2, Fig. 3, col. 4, lines 40-45, and col. 1.12, lines 30-34.)

Papadopoulos fails to explicitly teach the limitation of remote programming software. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes.

Neither Papadopoulos nor Lindner teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col. 6, line 10. See also col. 1, line 60-col. 1.2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines 1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 17, Papadopoulos teaches the web access module of claim 16, wherein the control devices are selected from the group consisting of I/O modules, motor controllers, and PLCs. (See Fig. 2 (32) and (40))

Papadopoulos does not explicitly disclose motor controllers. However, Lindner expressly discloses sensor or actuator (motor controllers). (See Fig. 1)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the disclosure of Papadopoulos as articulated above with the motor controllers as disclosed by Lindner, because this system would provide for the remote control of motors.

As to claim 18, Papadopoulos teaches a method of generating a controller program for at least one control device of an industrial control system that monitors and controls an industrial process, the method comprising: providing a web server within the industrial control system, wherein the web server is capable of communicating with at least one remote device via the Internet; (See col. 4, lines 25-39.) obtaining program development software including application software capable of being used to generate

the controller program; providing the program development software onto the Internet for transmission to the at least one remote device; and receiving from the at least one remote device the generated controller program. (See col. 4, lines 40-45.)

Papadopoulos fails to explicitly teach the limitation of remote programming software. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes. Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col. 6, line 10. See also col. 1, line 60-col. 2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines 1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 19, Papadopoulos teaches the method of claim 18, further comprising: obtaining an existing controller program from a memory device on which the existing controller program is stored, the program development software being associated with the existing controller program; (Fig. 2, col. 4, lines 40-45.) providing the existing controller program onto the Internet for transmission to the at least one remote device; and

after receiving the generated controller program from the at least one remote device, storing the generated controller program on the memory device in association with a version of the application software (See col. 12, lines 30-33 - configuration) that was utilized to generate that controller program. (See col. 4, line 45 - receiving response from the remote device.)

Papadopoulos fails to explicitly teach the limitation of remote programming software. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes. Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-co1.6, line 10. See also col. 1, line 60-co1.2, line 65; col. 4, lines 31-38;

col. 3, lines 45-65; col. 7, lines 1-54.. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 20, Papadopoulos teaches the method of claim 19, wherein the web server and a PLC are included within a web access module, wherein the PLC is coupled to a plurality of additional control devices within the industrial control system, and wherein the controller program is utilized by at least one of the PLC and one of the additional control devices.

Papadopoulos does not disclose a web server and a PLC are included within a web access module and the other limitations recited by above claim. However, Lindner expressly discloses such configuration. (See Fig. 1 and Fig. 2.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos with the configuration disclosed by Lindner, because this system would be more compact.

Claims 6-9, 11-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Papadopoulos et al. (US 6,061,603) in view of Lindner et al. (US 6,640,140.) and in further view of Hauet (US 6,799,077) in further view of Bronikowski et al. (6,947,798).

As to claim 6, Papadopoulos teaches the industrial control system of claim 5, wherein the web server is capable of sending the existing controller program along with the application software to the remote device by way of the Internet, so that the remote device is able to modify the existing controller program to generate the controller program.

Neither Papadopoulos nor Lindner teaches a remote device being able to modify a program.

However, Hauet teaches program modifications implemented by a user. (See col. 4, lines 14-20 and col. 3, lines 49-51.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and remotely storing information as taught by Lindner with this notion of user modification as disclosed by Hauet, because this system would allow a user to modify software remotely with minimal human interaction.

Neither Papadopoulos, Linder nor Hauet teach "program development software". However, Bronikowski does. Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-col.6, line 10. See also col. 1, line 60-col. 2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines 1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and, modifications taught by Hauet with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 7, Papadopoulos teaches the industrial control system of claim 6, wherein it is allowable for the remote device to remotely store a backup copy of the controller program generated based upon the existing controller program.

Neither Papadopoulos nor Lindner teaches a remote device storing information. However, Hauet teaches remote storage information. (See col. 4, lines 8-13 and col. 8, lines 20-25.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above

and remotely storing information as taught by Lindner with this notion of remote information storage as disclosed by Hauet, because this system would allow a user to store software remotely with minimal human interaction.

As to claim 8, Papadopoulos teaches the industrial control system of claim 6, wherein the program development software includes a plurality of versions, (See col. 12, lines 31-33 - configuration refers to version) of application software and wherein the existing controller program and a plurality of additional existing controller programs are stored in association with the respective versions of the application software that were employed to generate the respective existing controller programs.

Papadopoulos fails to explicitly teach the limitation of remote programming software. However Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes. Neither Papadopoulos nor Lindner teaches a remote storage of information.

However, Hauet teaches remote storage information. (See col. 4, lines 8-13 and col. 8, lines 20-25.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above

and remotely storing information as taught by Lindner with this notion of remote information storage as disclosed by Hauet, because this system would allow a user to store software remotely with minimal human interaction.

Neither Papadopoulos, Linder nor Hauet teach "program development software". However, Bronikowski does. Neither Papadopoulos nor Linder teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and Col. 2, lines 36-48; col. 5, line 62-co1. 6, line 10. See also col. 1, line 60-co1.2, line 65; col. 4, lines 31-38; col. 3, lines 45-65; col. 7, lines1-54.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and programming software remotely provided through the Internet as taught by Lindner, with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and, modifications taught by Hauet with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 9, Papadopoulos teaches the industrial control system of claim 6, wherein the program development application software that is sent along with the existing controller program is of a version (See col. 12, lines 31-33 - configuration refers to version) that was used to generate the existing controller program.

Neither Papadopoulos nor Hauet teaches the limitation of remote programming software. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes.

Neither Papadopoulos, Linder nor Hauet teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and col. 5, line 62-co1.6, line 10. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and, modifications taught by Hauet with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 11, Papadopoulos teaches the industrial control system of claim 1, wherein the web server provides the program development software to the remote device in response to a request received from the remote device. (See col. 4, lines 44-45 - receiving response from the remote device). Neither Papadopoulos nor Hauet teaches the limitation of remote programming software. However, Lindner expressly discloses web pages containing ladder scan functionality. (See col. 4, lines 25-30, 42-44, 53-59.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with programming software remotely provided through the Internet as taught by Lindner, because this system would eliminate the need for an attendant to be present for software changes.

Neither Papadopoulos, Linder nor Hauet teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and col. 5, line 62-col. 6, line 10. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and, modifications taught by Hauet with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

As to claim 12, Papadopoulos teaches the industrial control system of claim 1, wherein the web server provides onto the Internet, in response to a request received from the remote device, (See col. 4, lines 44-45 - receiving response from the remote device) information indicative of another Internet-accessible location at which the remote device can obtain desired program development software.

Papadopoulos does not teach the limitation of information indicative of another Internet-accessible location at which the remote device can obtain desired programming software. However, Lindner expressly discloses such limitation. (See col. 4, lines 53-59; See also '077 and col. 4, lines 31-36.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above with alternate Internet-accessible location as taught by Lindner or Hauet, because this system would provide redundancy in getting software upgrades.

Neither Papadopoulos, Linder nor Hauet teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and col. 5, line 62-col. 6, line 10. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and, modifications taught by Hauet with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Papadopoulos et al. (US 6,061,603) in view of Lindner et al. (US 6,640,140.) and in further view of Chan et al. (US 6,588,673) in further view of Bronikowski et al. (6,947,798).

As to claim 13, Papadopoulos teaches the industrial control system of claim 1 wherein, prior to the sending of the program development software to the remote device, the web access interface must receive a signal indicative of at least one of a payment agreement and a credit card number from the remote device.

Neither Papadopoulos nor Lindner teaches this notion of payment agreement and credit card number. However, Chan teaches this notion of agreement and credit card number. (See col. 9, lines 51-65.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above and remotely storing information as taught by Lindner with this notion of receiving an agreement and credit card number as disclosed by Chan, because this system would allow a user to purchase software upgrades with minimal human interaction.

Neither Papadopoulos, Linder nor Chan teach "program development software". However, Bronikowski does. See abstract, Figs 1-9 and col. 5, line 62-co1.6, line 10.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the teachings of Papadopoulos as articulated above, programming software remotely provided through the Internet as taught by Lindner and,

notion of receiving an agreement and credit card number as disclosed by Chan with the system and method for developing software programs disclosed by Bronikowski because this system would be capable of handling and utilizing data in a variety of formats associated with many commonly-used third party software programs, rather than simply specialized data formats.

(10) Response to Argument

Examiner summarizes the various points raised by the appellant and addresses replies individually.

The appellant argues that Bronikowski does not qualify as prior art because the reference claims priority as a continuation in part to Ryan et al. U.S. Patent No. 6,477,435 which does not include the claimed limitations (See Brief page 8, argument A).

In reply to A, examiner relies on Bronikowski to show the reference teaches "program development software". Bronikowski claims priority as a continuation in part to Ryan, U.S. Patent No. 6,477,435. Applicant argues that the prior Patent does not disclose a "program development software". However Ryan explicitly teaches a development tool for creating control programs executable on an industrial controller to control a process or equipment (see Ryan col. 2 lines 27-35). Therefore, Bronikowski reference that claims priority Ryan teaches the claimed limitation "program development software as claimed.

The appellant argues that the references in combination do not disclose (1) a control program created remotely for an internet connected PLC and (2) program

uploaded from the PLC to a remote user to aid in creating the control program (see Brief page 9, argument B).

In reply to B, Applicant is arguing the references in combination do not disclose (1) a control program created remotely for an internet connected PLC and (2) program uploaded from the PLC to a remote user to aid in creating the control program. These limitation(s) are not found in the claims. Claimed subject matter not the specification is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1986); *In re Self*, 213 USPQ 1, 5 (CCPA 1982); *In re Priest*, 199 USPQ 11, 15 (CCPA 1978).

The appellant argues that Papadopoulos does not disclose providing the program development software onto the Internet for transmission to the remote device, so that the remote device is able to generate the controller program (see brief page 9, argument C).

In reply to C, Papadopoulos teaches a system and method including a plurality of PLCs connected to a remote client through a web server (see fig. 1). The web server implements a mimic page that is generated or constructed on the web server to graphically represent controls and input and output commands that can be implemented on the current PLC and equipment configuration (see col. 9 lines 38-62). The remote user browses the internet to access the home page of the PLC system. In response, the web server generates a graphical controller i.e. "controller program" and sends the graphical representation "controller program" to the remote user so the user may access and

control PLC system devices and information (see col. 9 lines 64-col. 10 lines 20).

Therefore, the mimc pages that include a program interface which are generated to control the PLC system is interpreted to be the "controller program".

Examiner also relies on the teachings of Lindner. Lindner teaches a system and method for creating and transmitting webpages that include controller programs from a server to a remote FTP server to be used to control PLCs (see Lindner col. 4, lines 25-30, 42-44, 53-59). Therefore the combination of Lindner and Papadopoulos teaches the claimed limitation providing the program development software onto the Internet for transmission to the remote device.

The appellant argues that Papadopoulos does not disclose program development software that can be utilized to generate a controller program for at least one of the PLC and one of the I/O device (see brief page 10, argument D)

In reply to D, Papadopoulos teaches a system and method including a plurality of PLCs connected to a remote client through a web server (see fig. 1). The web server implements a mimic page that is generated or constructed on the web server to graphically represent controls and input and output commands that can be implemented on the current PLC and equipment configuration (see col. 9 lines 38-62). The remote user browses the internet to access the home page of the PLC system. In response, the web server generates a graphical controller i.e. "controller program" and sends the graphical representation "controller program" to the remote user so the user may access and control PLC system devices and information (see col. 9 lines 64-col. 10 lines 20). Therefore, the mimc pages that include a program interface which are generated to

control the PLC system is interpreted to be the "controller program". Therefore Papadopoulos teaches a program development software that can be utilized to generate a controller program for at least one of the PLC and one of the I/O device as claimed.

The appellant argues that Lindner fails to teach executing the controller program on the controller after it has been modified by a remote device (see Brief page 11 lines 1-15, argument E).

In reply to E, Applicant is arguing that Lindner fails to teach executing the controller program on the controller after it has been modified by a remote device. These limitation(s) are not found in the claims. Claimed subject matter not the specification is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding prior art. In re Sporck, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1986); In re Self, 213 USPQ 1, 5 (CCPA 1982); In re Priest, 199 USPQ 11, 15 (CCPA 1978).

The appellant argues that Papadopoulos does not disclose the web server is capable of sending the existing controller program along with the application software to the remote device by way of the Internet, so that the remote device is able to modify the existing controller program to generate the controller program (see brief page 12, argument F).

In reply to F, Papadopoulos teaches the web server implements a mimic page that is generated or constructed on the web server to graphically represent controls and input and output commands that can be implemented on the current PLC and equipment

configuration (see col. 9 lines 38-62). The remote user browses the internet to access the home page of the PLC system. In response, the web server generates a graphical controller i.e. "controller program" and sends the graphical representation "controller program" to the remote user so the user may access and control PLC system devices and information (see col. 9 lines 64-col. 10 lines 20). Papadopoulos teaches the user is capable of modifying the current controller program to generate a another view of the controller program. Taking the example taught by Papadopoulos in col. 9 lines 38-62, the user receives the controller program that has a start and stop buttons for a motor and a status of the motor. Initially, the status of the motor is off. The user may only select the option "on" to start the motor. Assume the user selects or presses the start button, the status of the motor will change to "on" instead of "off" as was previously indicated and the controller page is then changed to indicate that the user may select the "off" option, thereby generating a new controller since the controllers change. Therefore, the user located at a remote location may receive the controller program and modify the controller program to generate a new view of the controller program. Therefore Papadopoulos teaches the limitations as claimed.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Application/Control Number:
09/967,124
Art Unit: 2173

Page 29

Respectfully submitted,

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Jan. 4, 2007

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